

Carson Forest Plan Monitoring Report

1998

Forest Plan Sufficiency

The Carson Forest Plan is sufficient to guide management of the Forest over the next year. There are improvements that can be made as outlined in the recommendations section and will be scheduled as funding and personnel are available in FY 2000.

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Date

Status of Recommendations

-- *Forest Plan Direction for the Management of Mexican Spotted Owl and Northern Goshawk Habitat and Old Growth*

- Recommendation for 1999:

Correction pages have not been developed for the Carson Forest Plan. The Carson is continuing to use the Record of Decision signed by the Regional Forester for direction on the management of Mexican spotted owl and northern goshawk, as well as, old growth.

- o Recommendation for 2000:

Develop and issue correction pages for the Forest Plan to incorporate the changes in standards and guidelines made through the June, 1996 Record of Decision (ROD) for Amendment of Forest Plans. This region-wide amendment includes direction for the Mexican spotted owl, northern goshawk and old growth. Currently the ROD is used as a separate document to the Forest Plan.

-- *Inventory of River Sections Eligible for Wild and Scenic River Designation*

- Recommendation for 1999:

An inventory has not been completed for the entire Carson National Forest. Eligibility analyses have been completed on all ranger districts, except Canjilon.

- o Recommendation for 2000:

Complete the eligibility and classification inventory and analysis for wild/scenic/recreational river designation for the Forest and add eligible river sections to Management Area 18. This will protect these areas until a suitability assessment can be done.

-- *Forest Plan Direction for the Vallecitos Federal Sustained Yield Unit*

- Recommendation for 1999:

Most of the technical writing for the proposed amendment is complete. The proposed changes must still go through the NEPA process.

- o Recommendation for 2000:

Amend the Vallecitos Federal Sustained Yield Unit section of the Carson Forest Plan to reflect the intent of two court settlements (March, 1996).

-- *Cumulative Effects White Paper for Each District*

- Recommendation for 1999:

An effects analysis of past and present activities for the Camino Real Ranger District is nearly complete. A discussion of reasonably foreseeable future actions and their possible effects still needs to be included. No other ranger districts have started a cumulative effects white paper.

- o Recommendation for 2000:

Compose a white paper analyzing the cumulative effects of current projects for the Camino Real Ranger District. The paper would address and analyze the effects of past, present and foreseeable future projects for the small, categorically excluded projects the district is proposing. These projects are being implemented over a shorter period of time than past projects, which were designed and implemented at a much larger scale over a longer time frame, and cumulative effects were more intensively analyzed through the EA or EIS process.

Ideally, if a cumulative effects white paper is completed for each district, the information gathered would provide the Forest with an overall evaluation of the state of the Forest (existing conditions), as well as, what effects proposed projects would have on attaining desired conditions. Since no white papers could be completed for FY 1999, it would be unrealistic to recommend completion of more than one white paper in FY 2000.

-- *The Carson Forest Plan as a "User Friendly" Document*

- Recommendation for 1999:

Review and reorganization of the Forest Plan document has not been completed.

- o Recommendation for 2000:

Review of the Forest Plan and elimination of extraneous information is a “nice thing to do”, but with current funding and work load this is not a priority. Ideas on making the Forest Plan more accessible and easy to read will be accomplished as amendments are completed to comply with Forest Plan revision.

-- *Forest Plan Direction for the Management of Additionally Listed Species in the Southwestern Region*

- Recommendation for 1999:

The EIS and ROD for the region-wide amendment to add or change direction for listed species has not been completed, therefore correction pages have not been issued for the Carson Forest Plan.

- o Recommendation for 2000:

Develop and issue correction pages for the Forest Plan to incorporate the changes in standards and guidelines that are made, if an ROD is signed for additionally listed species. This region-wide amendment would provide direction from for plant and animal species and their habitats listed as either threatened or endangered since the approval of the Carson Forest Plan (1986).

-- *Management Indicator Species White Paper for the Carson National Forest*

- Recommendation for 1999:

This white paper was not included as a recommendation in the 1998 Monitoring Report.

- o Recommendation for 2000:

Compose a white paper analyzing the existing status of the management indicator species (MIS) listed in the Carson Forest Plan EIS. When MIS were identified and selected (according to CFR 219.19) all federally and State listed and Forest sensitive species were included. Many of these species have not been known to exist on the Forest for many years or not at all. Other species are only found on the periphery of the Forest. Blah blah

Monitoring Activities

On the Carson, we have been taking a close look at how we initiate a proposal, take it through the NEPA process, and if all goes well, implement it on the ground. By monitoring the NEPA assessment process and how the Forest Plan is used in project design and implementation, we have found that emphasis has been on project implementation, rather than what we are trying to really accomplish. This is partly due to the general descriptions of desired conditions (DC) found in the Forest Plan.

Through the ecosystem analysis process implemented on three ranger districts (Camino Real, Canjilon and El Rito), the districts are coming up with descriptions of desired conditions that are more detailed, and still under the umbrella of the Forest Plan's goals and objectives. A common understanding of what the DC (or goal) is provides those who design projects a better idea of what the outcome of the project should be -- what is the project really trying to accomplish? This ecosystem analysis process includes specific DC descriptions encompassing all natural resources, as well as, integrating the social aspects of the ecosystem. It is accomplished in a holistic manner focusing totally on conditions that need to be created.

When a proposed action is initiated, the existing and desired conditions are well defined, so we know where we are and where we need to go. It is much easier to work with the public when we ourselves have a better understanding of what we need to accomplish. The result is more projects with a sound purpose and need. The public understands what we are doing and they are supportive. Focusing on the DC also forces us to look further into the future, examining more closely the consequences of our actions

The following is a list of various monitoring activities that are either the prerequisite to being able to do something on the ground (we need to better define our existing condition) or a result of actions taken (how close has it taken toward our desired condition). We used to concentrate primarily on implementation monitoring -- did we get the job done that we said we would do? Now we are finding that we are doing more effectiveness monitoring -- is the action doing what we said it would do? Are we heading toward our desired condition? This change in what we are monitoring is the direct result of changing our emphasis from project implementation to what we are trying to accomplish.

Administrative/Operational Monitoring

- Customer satisfaction on how well we are managing the Forest is monitored through evaluation cards, newspaper articles and comments from recreation fee envelopes and walk-in visitors.
- Developed campgrounds and picnic areas are monitored at least on a weekly basis during the summer months by district/law enforcement personnel, campground hosts and/or concessionaires.
- Taos Ski Valley and Red River Ski Area operations are monitored at least once a week during the winter by the Questa District Snow Ranger. Sipapu Ski Area operations are monitored at least once a month.
- Wilderness patrols are performed by volunteers and/or recreation specialists several times during a summer. Patrols include inspections of trail conditions, dispersed camping areas and outfitter/guide permit use.
- Program oversight and quality control are provided by the Supervisor's Office Staff assistants in reviewing Biological Assessment and Evaluations (BAEs) for Forest Supervisor decisions, and all heritage resource clearances.
- Unit safety reviews are conducted annually.
- Facility, road, bridge and dam maintenance monitoring is ongoing.

- Road conditions are monitored by district personnel. Condition surveys contain the necessary documentation to plan for maintenance, closures and obliteration.

Baseline/Inventory Monitoring

- Air quality monitoring for the Wheeler Peak Wilderness Area has been collected for almost 20 years using photo comparisons from a camera permanently mounted near Tres Piedras.
- Baseline and existing condition information (primarily turbidity) are being collected in cooperation with the New Mexico Environment Department (NMED) for several creeks on the Tres Piedras Ranger District. Collected information will help determine whether these reaches should be removed from the State's 305b list for nonattainment.
- Stream cross sections and proper functioning conditions are being collected for the Leandro Creek to provide baseline information, as well as, monitor the progress of a Rio Grande cutthroat restoration project implemented this year.
- This monitoring is ongoing and helps determine where watershed work would provide the most significant results.
- Identification of existing and potential nonpoint source water pollution on the Carson is ongoing and helps determine where watershed work would provide the most significant results. For example: The impacts of major rainstorm events in critical locations are documented through photography.
- Vegetation data are being collected on each ranger district. This information is being used to determine existing conditions for wildland urban interface and forest health projects, salvage sales, Mexican spotted owl thresholds and old growth at the landscape level, and Forest Plan Revision preparation. Vegetation conditions are recorded on maps and tracked in the RMRIS database and GIS. Photo history is also used to document changes in vegetation composition, structure and health.
- Surveys to locate populations of the Arizona willow were performed on the Camino Real Ranger District in order to protect this sensitive species. It has not been found on the Camino Real.
- Threatened, endangered and sensitive species are surveyed for project and program monitoring requirements (e.g., 1996 region-wide Amendment for Forest Plans), as well as, to provide planning information during project analysis. Monitoring is ongoing for any TES species that is located. This includes monthly monitoring for trespass grazing to protect existing or potential southwestern willow flycatcher habitat.
- Annual counts are made of the recently reintroduced bighorn sheep population in the Wheeler Peak Wilderness Area and the elk herds in the San Antonio Mountain area. These inventories are done in cooperation with the New Mexico Department of Game and Fish to determine the herd's reproductive and adaptive success.
- A basin-wide survey of a 60 mile stretch of Comanche Creek was completed in 1998 to determine and locate aquatic habitat features for Rio Grande cutthroat reintroduction.
- Thermograph studies were made on several streams on the Questa Ranger District to monitor water temperature over a twenty-four hour period during different times of the year.
- Extensive work has been done on locating pure strains of the Rio Grande cutthroat on the Carson NF. The trout are located using the three pass regression method. Once populations are located a genetic analysis is made. These surveys are ongoing

and help determine whether project work is needed to protect and isolate the population.

- Wild trout populations and macroinvertebrates are also surveyed and monitored on the Carson NF.
- Pea clam surveys were performed in the Leandro Creek prior to cutthroat restoration.
- A volunteer project through Hawk Watch is performed annually in the summer and winter. Raptor surveys are performed on four designated routes within or adjacent to the Carson NF. The surveys help determine migratory trends in raptor populations.
- Point count transects for neotropical migratory birds (NTMBs) are accomplished annually on the Camino Real, Canjilon, El Rito and Tres Piedras ranger districts. Each transect is run several times during the summer. These counts provide trend data of NTMB migrations.
- Archeological and heritage surveys are completed prior to the implementation of any ground disturbing proposals to assure protection or mitigation of cultural and/or historic sites.
- Range readiness is monitored on annual basis to determine the time livestock can be released onto an allotment pasture. Utilization studies are monitored periodically in allotment pastures to determine whether overutilization is occurring.

Implementation Monitoring

- In cooperation with the NMED and the Environmental Protection Agency (EPA), implementation monitoring of best management practices (BMPs) has been completed and a report filed. The Carson NF was one of several forests involved in the study, as well as, other land management agencies.
- Periodic field visits to project areas by sale administrators, specialists and/or line officers usually result in informal monitoring and evaluation of the application of best management practices or actions needed. Documentation is captured through specialist notes, sale administration inspection reports and/or photo points.
- Recreation facility construction projects include reviews to ensure contract work meets specifications, environmental assessment requirements, and to monitor how well the design meets user needs. Such reviews have been performed at the Echo Amphitheater Picnic Area and Hopewell Lake Campground.
- Sikes Act projects, such as prescribed burning to improve the quality of habitat, are monitored after completion and are usually monitored over several years. Areas are visited to check implementation work, take photos and document project effectiveness. The NM Department of Game and Fish is a partner in monitoring that the Sikes Act project was completed and predicted results are met.
- Fuelwood monitoring includes field checking for "leave" trees and assessing how the public is harvesting. Monitoring information is considered when determining cleanup efforts needed for fuelwood areas. Cleanup efforts are also monitored. Recommendations and actions are normally documented.
- Precommercial thinning and salvage sale activities include post-sale inspections. Areas are examined to ensure contract requirements are met and results are documented in the RMRIS database.

Effectiveness Monitoring

- Vegetation treatments receive post-treatment monitoring to assess their effectiveness.
- Areas of natural regeneration are also inspected for rate of success.
- Prescribed fire treatments are monitored through on-site visits. Usually "before and after" photos are taken for burn projects to determine whether the anticipated objectives have been attained (i.e., has the palatability of the oak browse noticeably improved?). Recommendations and follow-up actions are determined.
- Road obliteration is monitored for effectiveness. Much of the monitoring is done on an informal basis by district personnel and observations from the public. Information and public feedback is evaluated, and changes to closure or obliteration techniques are determined.
- Numerous public field trips are taken each year on the Carson to areas where projects have been implemented. These trips result in informal monitoring of the effectiveness of actions taken and provide excellent opportunities for the public to express their opinions about a type of project. Line officers are also involved in these trips.
- Damage, erosion and changed conditions of prerecorded heritage resource sites are documented. Project areas are inspected upon project completion to verify that flagged archaeological sites have been avoided. Site monitoring forms are kept on file.

Certain assumptions made in the Carson Forest Plan are continually being validated by many of the monitoring activities listed above. Amendments, such as the 1996 region-wide amendment for the Mexican spotted owl, northern goshawk and old growth, can significantly change how we meet our goals and objectives, but not necessarily the assumptions or desired conditions made in the Forest Plan. Since the Forest Plan primarily focuses on desired condition rather than how to get there, we can be flexible in finding and determining better ways of moving toward our desired condition.

If Chapter 5 (Monitoring Plan) of the Carson Forest Plan is reviewed, much of the Carson's monitoring activities are closely linked to the items listed in Chapter 5. Formal evaluation and documentation of these monitoring activities is limited, given the emphasis and budget constraints put on the specialists. The information generated from these monitoring efforts achieves the intent of the majority of monitoring items found in Chapter 5 of the Forest Plan.

Progress Toward Desired Conditions

The most significant change that has taken place in moving toward our desired conditions over the past few years has been the involvement of people -- as a part of the ecosystem and playing an active role in refining desired conditions. A good example of this is with Camino Real Ranger District's (CRRD) emphasis on collaborative stewardship. For example, to reach the desired condition the district has planned and implemented small projects to thin forested stands with the help of the local residents and small businesses. Even with limited funding, the program is gradually expanding, adding new and progressive aspects. The concepts are now being incorporated into the urban interface projects designed to reduce wildfire hazards

near urban forest communities. The CRRD is currently working with the communities of Loma Linda, Fort Burgwin and Valle Escondido. Over 200 homes will have fire hazards reduced as a result of these projects. Dangerous fuels are being removed and/or burned. These projects have and continue to use community interaction through community volunteers and labor to achieve some of the work. The district is also providing personal use products as a part of these projects. The most significant achievement of collaborative stewardship has been designing projects that improve forest health, while meeting the needs of the public.

The success of Camino Real Ranger District's collaborative stewardship program was recognized by being selected as one of this year's ten best Innovations in American Government. This prestigious award is sponsored by the Ford Foundation and Harvard University's Kennedy School of Government and it includes a \$100,000 grant to replicate collaborative stewardship within the agency and beyond. Engaging the public in the developing desired conditions and implementing activities to move toward those conditions are keys to any progress we make toward accomplishing the Forest's goals and objectives.

The ecosystem analysis process implemented on three of the Carson's ranger districts has resulted in desired condition descriptions that are more detailed and succinct. We are now looking at new ways of describing desired conditions, both objectively and subjectively. Vision statements, such as those found in Forests Forever, provide us with more understanding of what people focus on when describing their forest. We are listening to what the local public feel is important to them when describing a desired condition. A desired condition is usually described in text form. We are working with various computer programs (such as Adobe Photoshop) to provide photographs and/or drawings to depict a desired condition in our ecosystem analysis or NEPA documents or in public places, such as our reception areas.

Cumulatively, many management activities have moved the Forest toward its desired conditions, but progress has not been adequately quantified. As existing information is integrated into GIS, the Carson can better measure its progress toward meeting desired conditions for road density, vegetation structure and composition (including old growth), riparian vegetation condition, visual quality, watershed condition, fisheries habitat, range condition and recreation.

Forest Plan goals for forest health, especially treatment of mid-seral vegetation to improve diversity, have not been met. Mixed conifer and ponderosa pine forests continue to contain large areas of small, densely growing trees. These conditions continue to pose a threat of catastrophic wildfire over huge landscapes. The Carson continues to find creative ways of accomplishing labor intensive work (mostly thinning of small diameter trees) as cost effectively as possible. With the constant decline in budgets, this is becoming more and more of a challenge. This year a Camino Real RD proposal was approved for one of the Forest Service's Forest Management Program Reinvention Pilot projects. A business plan for the Picuris/Truchas Land Grant Project

has been developed to address the problem of dense stands of mid-aged trees. Other projects such as this one are also being proposed on other districts.

New species have been listed as threatened or endangered since Forest Plan implementation, and these species are being protected through project design features and mitigation measures. Recovery plans have been completed for several species and provide direction to enhance their habitats. Coordination with universities and the US Fish and Wildlife Service and proactive management have prevented the listing of several species, such as the northern goshawk.

The stabilization of Rio Grande cutthroat populations and the reintroduction of the species in a number of the Carson's stream reaches has progressed well and monitoring is ongoing. Monitoring of the population of Rocky Mountain bighorn transplanted to the Wheeler Peak Wilderness from the Pecos Wilderness has shown that reproduction has been successful and the herd is growing better than anticipated.

Improved range conditions have resulted from the implementation of structural and nonstructural improvements, and more intensive management developed in allotment management plans. Continued NEPA analysis on all of the Forest's allotments will help sustain this type of improvement.

Watershed conditions have improved through the reintroduction of fire and woodland thinning projects. Road obliteration and road closure have helped restore watershed function through soil stabilization and vegetation establishment. Roads have been moved out of meadows and canyon bottoms where feasible and riparian function has been improved with structural and nonstructural improvements. Proper functioning condition of watersheds has been assessed for a number of watersheds and is ongoing.

Research Needs

The following are questions about relationships, processes and species about which more or better information would enhance management of the Forest:

- Current standards and guidelines are tied to single wildlife species. How does one develop a more holistic ecological perspective that addresses the processes of all animal and plant species on the Carson?
- What was the historic spatial arrangement of mature Douglas-fir?
- What bat species are found on the Carson and where?
- What other native fish are found on the Carson besides the Rio Grande cutthroat trout?
- Where are range lands depleted, as they relate to historic overgrazing?
- What research documentation is there that describes the possible effects of the management practices most commonly proposed in current projects?
- What are the impacts on the environment of increasing elk herds on the Carson? Where and how much forage is utilized by elk? What is the season of use for elk?
- What are the effects of forest activities on the lifestyles of people living in rural mountain communities in or near the Carson National Forest?

- What affects do existing roads have on extending drainage networks? Timing? Peak flows? Patterns of interception and rerouting?
- What is the best grazing system to apply to high mountain areas where forage is limited?

Barriers To Monitoring

The predominant barriers overriding effective monitoring and evaluation have been higher priority work and lack of funding. Congressional and budget intent comes to us functionally and still in the form of targets. In addition, user groups want us to produce a "product" (wilderness experience, firewood, forage, etc.) for them. Few are asking for monitoring results. In order to show responsiveness toward the public and accomplishments to Congress, we must maintain focus on products and targets. Often any internal or external interest there may be in monitoring is focused on the "gotcha" versus the adaptive management of learning. People or special interest groups are more interested in using our deficient documentation of monitoring activities as a way of demonstrating that we are not following regulations.

Another barrier has been the perception that monitoring can only be complex, scientifically designed, and rigorously evaluated activities. Many of the monitoring activities we have institutionalized are not even recognized internally as monitoring. These perceptions are compounded because there has not been a Forest, Regional, or National strategy which clearly and efficiently links existing efforts or identifies stratified actions which could serve multiple organizational or resource levels.

The ecosystem analysis process that was implemented on three of the Carson's districts included a monitoring schedule that the employees prepared for the next 4-5 years. The schedule addressed the monitoring that would be needed for the list of proposed activities that came out of the EM process. Many of the activities have been implemented, but the monitoring has not been documented and the schedule has not been updated by the districts. There is simply no incentive to accomplish monitoring. Until monitoring activities are made a target with direct funding, it will continue to be a low priority.

Emerging Issues

Human Dimension

Demographic trends indicate an increase of people migrating to the Southwest from other parts of the country. Although this trend includes an overall transition from a public which desires emphasis on commodity-oriented products and services, to a public which wants programs and program delivery to be amenity-oriented, there are still many small mountain communities dependent on the Carson National Forest for basic subsistence. There is a delicate balance of meeting the local needs for fuelwood, building materials, forage for livestock, water for irrigation and those who have just come into some of these communities and want to see a greater number of recreational opportunities, equal access, and an ever-increasing sensitivity to macro- and micro-environmental issues.

Some of these very diverse demands can be met simultaneously. There are a few special interest groups that don't want the harvesting of trees over 16 inches DBH in National Forests. Most of the products that local communities need are less than 16 inches. But there is no doubt a battle raging over the proper use of public lands which will shape the development of a forest plan revision in the future.

Physical/Biological Dimensions

The evolution toward an ecosystem management approach has renewed the Carson's sensitivity to ecological issues. Coupled with human dimension trends, this situation has brought needed Plan modifications to the forefront. An increase in the number of threatened and endangered plants and animals, increased knowledge of the function, processes, and interrelationship of ecosystems, and recognition that thresholds exist beyond which those systems may no longer be sustainable are foundation concepts upon which Plan Revision will be built.

Issues Being Litigated

Consistency with the Endangered Species Act, National Forest Management Act, Clean Water Act and Administrative Procedures Act - The Carson, along with five other National Forests are alleged to have violated these laws relative to the effects of grazing in watersheds and riparian areas. Stipulations were agreed upon by the Forest Service in April, 1998. The Carson NF is following these stipulations.

Consistency with the Wild and Scenic Rivers Act - Preservation interest groups have filed suit alleging several Region 3 forests, including the Carson, have failed to comply with the Wild and Scenic Rivers Act. Relief requested is an analysis and determination of eligibility and restraint from activities which could potentially preclude eligibility.

The Carson has completed eligibility studies on four ranger districts (Camino Real, Questa, El Rito and Jicarilla). Tres Piedras and Canjilon are planned for completion in the first quarter of FY99. In the mean time while going through the NEPA process, an eligibility analysis is completed on any section of river or stream that would be impacted by a proposed action. If a section is found to be eligible for wild and scenic designation, it is protected from any activities that may alter the outstandingly remarkable values that it was deemed eligible.

Consistency with the NFMA and NEPA - Forest Guardians has filed suit alleging that the Forest Service failed to provide interested parties with notice of timber sale planning activities and decisions, and has denied their administrative appeal rights. This issue is based strictly on procedural grounds and is not considered an emerging issue that would to forest planning or plan revisions.

Issues Being Appealed

Administrative appeals relating to decisions being made on the Carson are primarily regarding permit issuance on grazing allotments and timber sales.

It goes without saying that almost all allotment decisions are being appealed by Forest Guardians. The appeals are focused on 1) not completing a grazing suitability analysis and 2) not completing an cost/benefit analysis.

Since the 1996 Amendment of Forest Plans most decisions on harvesting timber on the Carson have been made with a Decision Memo, categorically excluded under category 4. The one appeal of a decision memo focused on 1) the harvesting of trees up to 24 inches DBH, 2) not including the allocation of old growth and 3) harvesting within a goshawk foraging area.

Other Issues

Endangered Species Act Consistency Relative to Forest Plans - There is a proposal to amend Land and Resource Management Plans (Plans) for the Southwestern Region of the Forest Service. The proposed amendments will add standards to protect habitats for threatened and endangered species. The purposes of this report are to present revised issue statements identified from scoping and the previous progress report, to present revised measures for evaluating alternatives, and to present proposed alternatives.

The Southwestern Region of the Forest Service proposes to amend the eleven plans for the forests and grasslands. The amendments would add new standards which strengthen direction for the protection of federally listed threatened and endangered species. The species that concern the Carson are the southwestern willow flycatcher and peregrine falcon. The amendment would apply to all subsequent project-level resource management decisions which will include site-specific environmental analysis and appropriate public involvement. The amendments are expected to take effect in the summer of 1999.

Wildland-urban Interface - Especially after the substantial property losses caused by the 1996 Hondo Fire, improving the wildland-urban interface is an issue which is being addressed now, and will continue. The mountain communities such as, Red River, Angel Fire, Penasco, Tres Ritos, Canjilon, Vallecitos and others are surrounded by forests which are at high risk of catastrophic wildfire. Public awareness programs are ongoing and implementation strategies are being developed. Safely restoring natural fire into adjacent ecosystems is a part of long-term solution which needs to be developed. Ecosystem analyses for the Camino Real, El Rito and Canjilon ranger districts, as well as, the Red River and Hondo Fire areas have been completed. Priority treatment areas were identified.

Forest Health - Historical activities on the Carson National Forest have resulted in unnaturally dense conditions, which have reduced the biological diversity across an expansive landscape. Thousands of acres need to be thinned in order to move toward a more natural and healthy forest. It is essential to reestablish the large tree/old growth component important to many wildlife species and eventually a sustained yield of larger products. Government downsizing has reduced the number of employees and funding. This, in turn, limits the treatment of acres needed to significantly improve forest health.

Ecosystem Management - The emphasis to become an "ecosystem management driven" organization instead of a "timber driven" organization fit well with the shift to Collaborative Stewardship. However, doing the "right thing" does not always produce significant revenue for the US Treasury. The government appropriation system still ties funding to outputs. This makes sense if you are in the business of selling a product. It creates problems when you are in a stewardship role, maintaining a healthy, fully functioning ecosystem. Products do result from management, but they are not the driving force and may not be the "high volume" producers.

Collaborative Stewardship - Working more collaboratively with local partners has emerged as a priority issue over the past few years. New relationships with partners and members of the public are breaking some traditional barriers. Collaborative stewardship is helping to address such emerging issues as:

- identifying and addressing needs of growing communities in and adjacent to the Carson National Forest.
- continuing to deliver programs which balance amenity, commodity and lifestyle needs.
- developing effective relationships with the local Native American tribes.

Listening to people, however, requires a significant amount of employee time. There has to be time left over to administer the work on-the-ground. The time limitation also takes its toll on incorporating the stewardship concepts to the myriad of programs and issues across the Forest. For example: reaching consensus on forest roads and transportation systems or resolving conflicts between recreation user groups such as all terrain vehicle enthusiasts and archery hunters.

In reality the downsizing and decreasing budgets, along with the conflicts and discontent, helped to stimulate or necessitate collaborative stewardship - a new way of doing business. Ironically, the downsizing and budget cuts are now the limitations on implementing the program to all facets of the Forest's responsibilities. In the past several years the Carson has experienced over a 30 percent reduction in the permanent workforce. There is a limit to serving the public and caring for the land with such restricted resources.

Watershed and Riparian Health - Key to a sustainable healthy forest ecosystem are properly functioning watershed and riparian systems. Historic railroad logging across watersheds, and settlement activities (such as grazing) in riparian areas, significantly altered these systems in the early 1900's. Although most of these systems have recovered remarkably, many still need improvement to regain their full natural function. Related issues emerging on the Carson include:

- identifying and managing water rights
- restoring fisheries functions where appropriate
- water quality

Surveys are being completed to identify the location and condition of existing riparian areas. Properly functioning conditions are also being assessed. For key projects, baseline watershed quality information is being collected.

Transportation System - Access to and within the Carson National Forest is an issue which continues to become more complex. Transportation issues include:

- improving accessibility to all users through better road and trail systems management.
- addressing the needs of off-highway vehicle use.
- increasing need for higher maintenance levels and better signing of Forest roads.
- private development of lands adjacent to the Forest boundary, especially around Taos, Red River, Angel Fire and Tres Piedras. Traditional access to the Forest is being denied along some interfaces where residential subdivisions are developed.
- increasing demand for rights-of-way across Forest land.